

Claim Amendments

Please enter the following amendments, which include cancellation of claims 1-15, 17-23, 25-35, 38-51, 53-57, 59-75, 78-81, 83-86, 97-103 and 105-116 and amendment of claims 16, 24, 36, 37, 52, 58, 82, 88-96 and 104.

1-15 (canceled)

16 (currently amended): An isolated and purified antibody encoded by antibody genes comprising a light chain antibody gene and a heavy chain antibody gene, wherein the family members of the light chain antibody gene and the heavy chain antibody gene are selected from the group consisting of Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VId, Set VIe, Set VII, and Set VIII V_H4-39/D6-13/J_L5/V_LκO12/2/J_Lκ1/κ2 (Set I), V_H4-34/D5-5/J_H6/V_LκA17/J_Lκ1/κ2 (Set II), V_H3-21/J_H6/V_Lλ3h/J_Lλ3 (Set III), V_H1-69/D3-16/J_H3/V_LκA27/J_Lκ1/κ4 (Set IV), V_H1-69/D3-10/J_H6/V_Lλ1c/J_Lλ1 (Set V), V_H1-02/D6-19/J_H4/V_LκO12/2/J_Lκ1/κ2 (Set VIa), V_H1-03/D6-19/J_H4/V_LκO12/2/J_Lκ1/κ2 (Set VIb), V_H1-18/D6-19/J_H4/V_LκO12/2/J_Lκ1 (Set VIc), V_H1-46/D6-19/J_H4 (Set VId), V_H5-51/D6-19/J_H4/V_LκO12/2/J_Lκ2 (Set VIe), V_H1-69/D3-3/J_H4/V_LκA19/J_Lκ4 (Set VII), and V_H1-69/D2-2/J_H6/V_LκL6/2/J_Lκ3 (Set VIII).

17-23 (canceled)

24 (currently amended): An -anti-idiotype- antibody, a peptide antigen or an aptamer that binds to the antigen-binding region of an antibody encoded by antibody genes selected from the group consisting of Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VId, Set VIe, Set VII, and Set VIII comprising a light chain antibody gene and a heavy chain antibody gene, wherein the family members of the light chain antibody gene and the heavy chain antibody gene are selected from the group consisting of V_H4-39/D6-13/J_H5/V_LκO12/2/J_Lκ1/κ2 (Set I), V_H4-34/D5-5/J_H6/V_LκA17/J_Lκ1/κ2 (Set II), V_H3-21/J_H6/V_Lλ3h/J_Lλ3 (Set III), V_H1-69/D3-16/J_H3/V_LκA27/J_Lκ1/κ4 (Set IV), V_H1-

69/D3-10/J_H6/V_Lλ1c/J_Lλ1 (Set V), V_H1-02/D6-19/J_H4/V_LκO12/2/J_Lκ1/κ2 (Set VIa), V_H1-03/D6-19/J_H4/V_LκO12/2/J_Lκ1/κ2 (Set VIb), V_H1-18/D6-19/J_H4/V_LκO12/2/J_Lκ1 (Set VIc), V_H1-46/D6-19/J_H4 (Set VID), V_H5-51/D6-19/J_H4/V_LκO12/2/J_Lκ2 (Set VIe), V_H1-69/D3-3/J_H4/V_LκA19/J_Lκ4 (Set VII), and V_H1-69/D2-2/J_H6/V_LκL6/2/J_Lκ3 (Set VIII).

25-35 (canceled)

36 (currently amended): A mixture of two or more of the ~~anti-idiotype~~ antibodies, peptide antigens or aptamers of claim 24.

37 (currently amended): A pharmaceutical composition comprising at least one of the ~~anti-idiotype~~ antibodies, peptide antigens or aptamers of claim 24, in a pharmaceutically acceptable excipient.

38-51 (canceled)

52 (currently amended): The ~~anti-idiotype~~ antibody, peptide antigen or aptamer of claim 24, further comprising a cellular toxin.

53-57 (canceled)

58 (currently amended): The ~~anti-idiotype~~ antibody, peptide antigen or aptamer of claim of claim 24, further comprising a detectable moiety.

59-75 (canceled)

76 (original): A hybridoma producing the antibody of claim 16.

77 (original): A hybridoma producing the antibody of claim 24.

78-81 (canceled)

82 (currently amended): A method of

(a) determining whether a patient with B cell chronic lymphocytic leukemia (B-CLL) has a form of B-CLL susceptible to treatment directed to eliminating idioype-specific B cell receptor-bearing B-CLL cells, or

(b) following the progression of treatment of B-CLL in a patient having a form of B-CLL susceptible to treatment directed to eliminating idioype-specific B cell receptor-bearing B-CLL cells,

the method comprising determining whether the B cell receptors on the B-CLL cells ~~have an idioype~~ are encoded by antibody genes comprising a light chain antibody gene and a heavy chain antibody gene, wherein the family members of the light chain antibody gene and the heavy chain antibody gene are selected from the group consisting of V_H4-39/D6-13/J_H5/V_LκO12/2/J_Lκ1/κ2 (Set I), V_H4-34/D5-5/J_H6/V_LκA17/J_Lκ1/κ2 (Set II), V_H3-21/J_H6/V_Lλ3h/J_Lλ3 (Set III), V_H1-69/D3-16/J_H3/V_LκA27/J_Lκ1/κ4 (Set IV), V_H1-69/D3-10/J_H6/V_Lλ1c/J_Lλ1 (Set V), V_H1-02/D6-19/J_H4/V_LκO12/2/J_Lκ1/κ2 (Set VIa), V_H1-03/D6-19/J_H4/V_LκO12/2/J_Lκ1/κ2 (Set VIb), V_H1-18/D6-19/J_H4/V_LκO12/2/J_Lκ1 (Set VIc), V_H1-46/D6-19/J_H4 (Set VID), V_H5-51/D6-19/J_H4/V_LκO12/2/J_Lκ2 (Set VIe), V_H1-69/D3-3/J_H4/V_LκA19/J_Lκ4 (Set VII), and V_H1-69/D2-2/J_H6/V_LκL6/2/J_Lκ3 (Set VIII), wherein if the B cell receptors on the B-CLL cells have an idioype encoded by the antibody genes, the patient has a form of B-CLL susceptible to the treatment or the treatment of the patient has not eliminated the B-CLL cells.

83-86 (canceled)

87 (original): The method of claim 82, wherein the cells that have B cell receptors that have an idioype encoded by antibody genes from Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VID, Set VIe, Set VII, or Set VIII are quantified.

88 (currently amended): The method of claim 82, wherein ~~the determination step comprises amplification of~~ idioype-determining regions of the antibody genes or mRNA are amplified and ~~evaluating whether the amplified regions~~ are evaluated to determine whether they ~~are amplified from~~ correspond to the antibody genes of Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VIId, Set VIe, Set VII or Set VIII.

89 (currently amended): The method of claim 88, wherein the ~~evaluation step comprises sequencing the amplified regions~~ are sequenced.

90 (currently amended): The method of claim 88, wherein the ~~evaluation step comprises evaluating whether the amplified regions~~ are evaluated to determine whether they hybridize with equivalent regions from Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VIId, Set VIe, Set VII or Set VIII.

91 (currently amended): The method of claim 82, wherein the ~~determination step comprises evaluating whether the patient~~ is evaluated for has circulating antibodies with an idioype encoded by the antibody genes from Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VIId, Set VIe, Set VII, or Set VIII.

92 (currently amended): The method of claim 91, wherein ~~the evaluation step is performed by evaluating whether the patient~~ is evaluated for has antibodies that bind to a binding agent specific for the idioype encoded by the antibody genes from Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VIId, Set VIe, Set VII, or Set VIII.

93 (currently amended): The method of claim 92, wherein the binding agent is an anti idioype antibody, a peptide antigen, or an aptamer.

94 (currently amended): The method of claim 93-92, wherein the binding agent further comprises a detectable moiety.

95 (currently amended): The method of claim 82, wherein ~~the evaluation step is performed by mixing together~~

an agent that binds to the antigen-binding region of an antibody encoded by antibody genes selected from the group consisting of Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VIId, Set VIe, Set VII or Set VIII, the agent further comprising a detectable moiety, is mixed together with and lymphocytes of the patient, then the determining whether lymphocytes are evaluated to determine whether lymphocytes that bind to the agent are present.

96 (currently amended): The method of claim 95, wherein the agent is selected from the group consisting of an ~~anti-idiotype~~ antibody, a peptide antigen, and an aptamer.

97-103 (canceled)

104 (currently amended): A method of treating a patient having B-CLL caused by B cells comprising B cell receptors that are encoded by antibody genes from Set I, Set II, Set III, Set IV, Set V, Set VIa, Set VIb, Set VIc, Set VIId, Set VIe, Set VII, or Set VIII, the method comprising administering the pharmaceutical composition of claim 37 to the patient ~~an agent that binds to the antigen-binding region of an antibody encoded by the antibody genes~~.

105-116 (canceled)